GEOGRAPHIC SCHOOL BULLETINS

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301 ERIC PAVEL

ARGENTINE gauchos, legs protected by leather fenders, ride in parade at Salta.

► Argentina Looks Forward

► Tierra del Fuego

► Island of Cuba

► Manatee's Pasture, the Sea

► Adventuresome Captain Cook

EYES TURN south this issue to honor Pan American Week. Next week, steaming Sumatra, where civil war disrupts life in the Republic of Indonesia.

MOORE-MC CORMACK LINES

LUNCHTIME for today's gaucho means a lean cut of juicy beef sizzling on an open grate. Nomadic gauchos of old have faded away, but their descendants still live in the saddle. Many work for owners of large estates, belong to trade unions. But they preserve the traditional broadbrimmed sombrero, baggy pants, and poncho. After a meal, inspired by the loneliness of the pampa and the loping gait of their horses, they sing the same sad songs.

More than six million people had found new homes.

The depth of this migration remains apparent today. One of every four Argentines has Italian blood. Many feel themselves closer akin to Europe than to their other Pan American neighbors.

New talents were stirred into the economy. Expert farmers among the immigrants sowed such novel crops as wheat, barley, maize, oats, flax, and rye in the fertile soil. These crops all rank as substantial exports today. Other newcomers possessed hands honed to the feel of tools. These they turned to the industrialization of their adopted land.

Industrial output today is catching up with agriculture. But self-sufficiency for the nation is a hope for the future. Paradox peers out at every hand. Lack of coal and iron deposits impose a basic handicap. But hydroelectric power is there for the taking. Some roaring rivers have been harnessed, but the lights of Buenos Aires still shut their eyes periodically because of the power shortage.

JEAN AND FRANC SHOR, NATIONAL GEOGRAPHIC STAFF

PROUD Argentines call it the widest street in the world. It is Avenida 9 de Julio, a main street of the capital named in honor of the day of independence from Spain. In the shadow of an obelisk commemorating the city's founding, *porteños* (literally "people of the port") stroll the avenue, window-shopping or tasting a cup of coffee at one of the hundreds of stand-up coffee bars. Authors Jean and Franc Shor take *National Geographic Magazine* readers on a tour of "B. A." and all Argentina in an illustrated article in the March, 1958, issue. A new Atlas Series Map, showing Argentina, comes with the issue.

ARGENTINA

MOORE-MC CORMACK LINES

A QUARTER of a ton of thundering beef on the hoof is slowed to a walk by the lasso encircling his neck. Only a calf, he is in luck—this time. In a year he may be on his way to a *figorifico* (meat freezing plant) in Buenos Aires.

Tons of prime Argentine beef move out of bustling Buenos Aires each year in the chilled holds of refrigerator ships—enough to make Argentina the world's foremost beef exporter. Other choice cuts find their way to the tables of millions of Argentines in spreading cities and towns.

Well-fed Europeans and Argentines alike can thank early Spanish colonizers for their after-dinner contentment. It was in 1552 that the famous "seven cows and one bull" arrived from Spain. Early settlers, disillusioned in their search for quick riches in the misnamed "land of silver," turned instead to stock raising.

Cattle thrived on the green sea of grass that covered what Indians called the *pampa*, "open space." As crossbreeding with imported strains improved herds and wild grass gave way to better quality Sudan grass and alfalfa, the foundation was laid for a strong pastoral economy.

Interestingly enough, the introduction of the unassuming alfalfa sparked an economic and social chain reaction. Owners of the *estancias*—giant estates carved out of the Texaslike pampa by descendants of the Spanish settlers—found that alfalfa was just the thing to fatten their herds. But unlike wild grass, it had to be sowed, reaped, and cut. This called for many more ranch hands than the few, weather-beaten gauchos who rode the range, rounding up cattle.

Out went the welcome sign for immigrants. Soon they came—in streams from Italy, Spain, Germany, France, Armenia, and an influential trickle from Great Britain. By 1930, when the influx was throttled down, a nation had been shaped.

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JEAN AND FRANC SHOR, NATIONAL GEOGRAPHIC STAFF

SKIRTS and colorful ponchos swirl as a group of dancers in the north's Jujuy Province recall Indian culture. Musicians play flute, drum, guitar. Felt hats put women in traditional style. Movements bear striking resemblance to those of North American square dancers. Fields of wheat, maize, and sugar cane stretch along Rio Grande's banks below.

Unlike neighboring South American republics, Argentina never had a large native population. Some 15,000 pure Indians remain, many in northern provinces.

DESCENDANTS of original horses brought by Spanish splash across a river bed heading toward civilization. When conquistadores clashed with Indians, horses strayed, soon multiplied on rich pampa grass. Result is a strong, agile animal that can travel many miles across taxing country without tiring.

HANS MANN

Meat and crops earn foreign income. But the nation flirts with bankruptcy, due largely to the irresponsibility of the recently ended era of Dictator Juan Perón.

Oil runs in the country's veins. But economists say a transfusion of development capital is needed to start it pouring through industrial arteries. Lead, zinc, tungsten, and uranium hide in the foothills of the Andes. But modern mining methods are just beginning to nibble at them. Flat land invites modern transportation. But railways, although extensive, are aging, and highways are mostly byways.

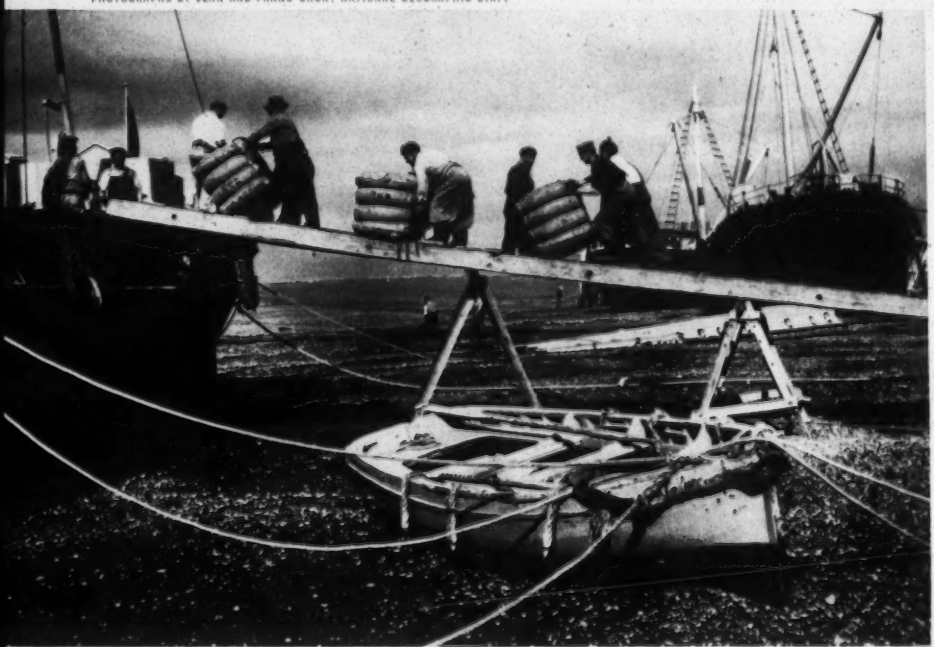
In the calm after her first fully democratic election in 30 years, Argentina looks anxiously for an improvement in her fortunes. From the orange groves of the tropical north to Tierra del Fuego at the "end of the earth," people sip their yerba maté and watch for the economic sky to clear.

Like a sleeping giant, Argentina carries within its frame the brains, muscles, and nerve system of a great nation. But like a budding adolescent, it has yet to blossom into full potential. A.P.M.

COATS of some 20 million sheep thicken on the arid, windswept plateaus of Patagonia to the south. A good shearer can give a haircut to 150 sheep a day.

STEVEDORES, below, at the port of Rio Gallegos near Argentina's tip, boost bales of fleece into a coastal steamer for transshipment to Buenos Aires. Tides which rise up to 38 feet add to the difficulties, leaving ships sitting on the dry bottom.

PHOTOGRAPHS BY JEAN AND FRANC SHOR, NATIONAL GEOGRAPHIC STAFF



Tierra del Fuego ... BLEAKNESS AT 'WORLD'S END'

'ISLAND OF FIRE' got its unlikely name from Ferdinand Magellan, who watched native Indians lighting bonfires to warn their brethren of his approaching ships. Centuries later, Captain James Cook traced its outline during one of his cruises described in this issue. Modern-day settlers are turning it into fertile pastureland, building towns like rough-hewn Ushuaia, below.

PHOTOGRAPHS BY JEAN AND FRANC SHOR, NATIONAL GEOGRAPHIC STAFF

DWELLERS on the island, held jointly by Argentina and Chile, live rich in scenery if poor in warmth. Even in midsummer housewife wears a sweater to bargain with traveling butcher. Snow-thatched peaks form tip of great Andes chain that dips its spine into the cold sea at Tierra del Fuego.

THE "WHITE GOLD" of southern Argentina—wool—spills across the famous Strait of Magellan onto that oft-reviled island known as Tierra del Fuego. Fine sheep imported from New Zealand's Corrie Dale thrive on the wind-blown pampa grass. A climate that might be compared to a windy Labrador only makes their protective coats grow faster.

Oddly, it is not the shivers or the marauding Patagonian foxes that pose the sheep's greatest peril. It is rain. Rain-soaked fleece proves so heavy that a sheep often tumbles off its feet. There it lies helpless, spindly legs in the air, until it dies or is rescued by a horseback-riding shepherd.

Charles Darwin, the English naturalist, must have had his eyes filled with Tierra's rugged beauty when he discovered Beagle Channel in 1832. It was his voyage that revealed to mariners the knife-edge of water that cuts 140 miles across the southern quarter of the island. Here mountain sides dive straight into the water. Sparkling glaciers glisten between their flanks, inching slowly downward. Albatross and sea lion keep the visitor company.

Midway through this channel Darwin came upon the mountain-ringed scene at right. Ushuaia, which only recently yielded its title of the hemisphere's most southerly town to its Chilean neighbor, Puerto Williams, now nestles here. Its broad harbor is an open invitation to the few cruise ships that find their way to Tierra del Fuego. But soon a road will open that will enable many more to view the rolling hills, jagged peaks, and windy pampa of this doorstep to the Antarctic. A.P.M.

BEACHES like this at Varadero, on the north coast, often felt the tread of pirate boots in Cuba's early days. South coast's Isle of Pines is claimed to be the model for Stevenson's "Treasure Island." Certainly buccaneers hatched evil plans in its hideouts. But the real treasure held by its sands is the sparkle of sunlight on the galloping blue surf.

PAN AMERICAN AIRWAYS

find themselves welcomed with genuine warmth. "How do the New York Yankees look this season?" they will be asked. Cubans feel close enough to the United States, emotionally as well as geographically, to want to know.

The historic reason for this cordiality is the memory in Cuba of the Americans who spent blood to free the nation from Spain in 1898. The recollection is kept green by such monuments as the statue of Theodore Roosevelt, one-time Colonel of the Spanish-American War's Rough Riders, etched with his words, *"Only those are worthy of life who do not fear death."*

Life goes on in Cuba despite the mutter of insurgent rifles, the crossfire of threats. Auto horns still din as always in the city streets. Meanwhile, in the rolling countryside, the sugar crop gets heaved aboard creaking, stave-sided wagons, below, and *Americanos* still find a ready welcome in a determinedly gay Havana.

PAN AMERICAN UNION

H. ARMSTRONG ROBERTS

CUBA

Shadows Darken 'Pearl of Antilles'

A MOTORING tourist pulls up at the southern end of U. S. Route One —Key West, Florida. "Hey, Jack, how far to Havana?" Since a ferry plows the 100 miles to Cuba, it's a sensible question. Cubans ask it —the planter's wife, the mining engineer, the insurgent lurking in the mountains of Oriente Province. Whether they want to shop, buy tools, or overthrow a government, the miles they must travel begin at a 24-carat blue-white diamond, set in the floor beneath the dome of Cuba's gleaming capitol, left.

COLUMBUS paid Cuba its first compliment in 1492. "Loveliest land that human eyes have ever beheld," he called it. He saw only whispering palms, long shore lines wearing coral necklaces, bright-plumed birds, and abrupt mountains. He did not foresee a nation of 6,000,000 with a significance that goes deeper than beauty.

Shaped like a fish leaping on an angler's line, Cuba is a chunk of limestone jutting from deep water to form the largest of the West Indies. Dense forests once shrouded the sites of future cities and farms. Cedar and mahogany still blanket mountain peaks that jut as high as 6,560 feet.

Some 200 species of birds add glinting colors to the rain forests. Oddities include several kinds of bats, a tree rat, and the manatee (see page 310).

Cuba's rich, warm soil grows the tobacco that makes famed cigars. Coffee ripens beside it on southern mountain slopes. Heavy deposits of iron await fuller development. Cuban copper and manganese bolstered the free world's stockpiles during World War II.

Yet with all this productivity, one half the island's farmland is turned over to the cane fields that make Cuba the world's leading sugar exporter. Best customer, of course, is the United States.

Cubans are glad of the American sweet tooth, biting deep into the produce of the cane fields, demanding more of the huge sugar industry. One out of every three on the island finds employment in some aspect of sugar. But friendship and understanding between Cuba and its mighty neighbor is more than an economic convenience.

Just recently a multimillion-dollar hotel opened in Havana to take care of American visitors. Those who make the easy trip from Miami or Key West will

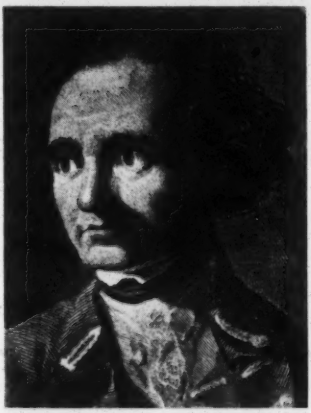
Captain Cook—Pacific's Columbus

ALL EYES of the *Endeavour*'s crew fixed on the new commander. Six feet tall and keen-eyed, he owned a reputation that had come aboard before him. From humble beginnings, he had served in the Royal Navy and was the brilliant surveyor of Newfoundland's coast. Now, in 1768, he was bound for the South Pacific to observe the transit of Venus.

Thus did Captain James Cook embark on an unparalleled career of Pacific discovery. No one then knew the ocean's enchanting islands. No one fully realized its immensity (one-third of the world's surface). Cook sailed into the unknown, and Britain acclaimed him for doing for "geography and seamanship more in his voyages than any other man since Columbus."

The 97-foot *Endeavour* rounded storm-racked Cape Horn and reached Tahiti in April, 1769. Cook named the archipelago the Society Islands, honoring his sponsor, Britain's Royal Society. Next, he turned westward, toward New Zealand, voyaging 1,500 miles off course in an unavailing search for a southern continent imagined by some geographers. Carefully he charted New Zealand and amassed material on the native Maoris and even the songs of birds which "seemed to be like small bells. . . ." The *Endeavour* nosed into Botany Bay, Australia. Later its timbers shook in a near catastrophe on the Great Barrier Reef. The records swelled with information about kangaroos, boomerangs, snakes, flowers.

Back home, Cook was received by King George III. His discoveries in New Zealand and Australia awaited later recognition. But everyone thrilled to his accounts of strange flora and fauna. His severe enforcement of a new shipboard diet



A KINDLY Captain of "happy" ships, Cook was also an observant scientist. From vivid tropical flowers to dignified Antarctic penguins, few details escaped his fluent quill and open notebook. The illustrator of his book, "Voyage towards the South Pole and round the World," captured the ornateness of outriggers off Otaheite (Tahiti), but dressed natives in turbans, below.

ILLUSTRATIONS FROM PAINTINGS BY W. HODGES

UMI

PAINTING BY NATIONAL GEOGRAPHIC STAFF ARTIST WALTER A. WEBER

Manatee—Bewhiskered Sea Cow

A MARVELOUS mammal, the manatee. Vaguely resembling a seal, it browses serenely in Florida and more southerly waters. It contentedly devours enormous meals from pastures of sea weed. Hence its nickname, sea cow. Otherwise unlike a cow, it wears sunken, expressionless eyes, valvelike nostrils, and an upper lip split lengthwise in two lobes fringed by bristly whiskers like that of an 1890 gentleman. When the half lips snap at vegetation and the big teeth crunch noisily, listeners recall long-ago fears. Mexicans once believed that manatees crept ashore at night to kidnap village women. Imaginative mariners, watching distant females nursing their young, called manatees human fish. Mermaids may thus have been invented.

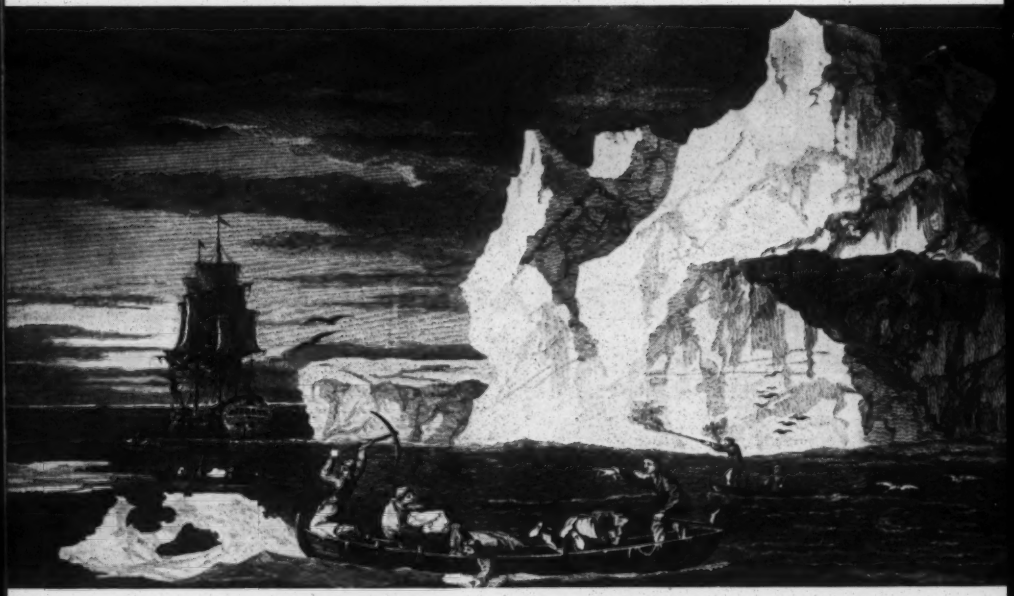
Sea cows certainly are model mothers. In April or May one or two young are born. Infants weigh up to 60 pounds, compared to the adult's usual 450. From their underwater delivery room, infants are immediately lifted to the surface, for manatees must breathe air. Miami aquarium onlookers once chuckled as a female brought her young hopeful to the surface on her shoulder.

Manatees sometimes reach a length of 12 feet and tip the scales at a ton. They forage under water for up to 15 minutes before surfacing for a draft of air.

They're not as dumb as they look, aquarium viewers report. One manatee offers its right flipper for "handshaking," like a trained dog. Others have been observed seemingly kissing each other.

Unlike many beings (including loftier humans) manatees quarrel little. They seek untroubled lives. But like men and women, they don't always find it. Crocodiles and killer whales imperil them. Man has killed them for their edible flesh and for their oil. But Florida law now protects the defenseless, family-loving manatee. They're scarce; and now their youngsters are allowed to cling to parents until half grown and able to take to the water on their own flippers. S.H.

Probing Antarctic Regions, Cook Battled "Ice Islands"



that included citrus fruit had conquered scurvy, scourge of seamen. This was acclaimed a major achievement. From then on English seamen were called "Lime Juicers" or "Limeys."

Cook returned to the South Seas to prove or disprove, finally, the notion that a southern continent existed. Again in Tahiti, marveling crewmen watched a regatta of 160 double canoes with huge uplifted prows, flanked by 170 smaller craft. Eyes popped equally wide at mysterious stone figures on Easter Island.

Cook pierced the Antarctic Circle to draw nearer the South Pole than had any other voyager. The Pacific uncloaked its proportions—some 9,300 miles from Bering Strait to the Antarctic. Cook was at sea during one period for 122 days; once he sailed about 10,000 miles over strange water without glimpsing land. One discovery—South Georgia, lying 1,200 miles east of Cape Horn—seemed a worthless, isolated island. Yet, it became famous for sea elephants, fur seals, and for whale fisheries. Cook proved that no Antarctic land mass extended to habitable latitudes, but guessed, prophetically, that there was an ice-bound continent capping the south polar region.

Cook rejected earned repose to take part in his period's most exciting and dangerous quest—the search for the Northwest Passage. Navigators had long probed North America's east coast for a short route to the Pacific. Cook tapped at the west coast. He skirted the shores of present-day Oregon and Washington, put in at Nootka Sound, on Vancouver Island, then sailed north, nosing into Cook Inlet, seeking a possible route to Hudson Bay. Baffled, he swung past Alaska's Kodiak Island. His keen eyes diagnosed volcanic activity. A century and a half later, a National Geographic Society expedition discovered the near-by Valley of Ten Thousand Smokes.

Probing ever north, Cook proved the narrowness of Bering Strait, the break in the land bridge between North America and Asia. Then he sailed away to discover Hawaii and die there in 1779 under the knife of a native. A monument marks the place where he fell. At high tide, his own ocean—the great Pacific—washes over the plaque. S.H.